

# **GTFS-Flex**

Based on the N-CATT webinar presented by Thomas Craig, Caroline Rodier, and Marcy Jaffe on June 18, 2020

#### **GTFS**-Flex

Describes an Integrates:

- Transportation Network
  Companies like Uber and Lyft
- Taxi services
- Paratransit
- General Public Dial-a-Ride
- Fixed Route Transit

Into one comprehensive specification and trip planner.

Thomas Craig is the CEO of Trilium and their lead project manager for custom and large scale software and data deployments, such as GTFS-flex data creation. He is also a member of the OpenTripPlanner Project Leadership Committee.

Marcy Jaffe has works as a Transportation Innovation where she supports tribal, private, small rural and intercity transport. Shas has worked with National RTAP to create their Program in GTFS toolkit.

Dr. Carlinue Rodier is a researcher at the institute o Transportation Studies at UC Davis. Her major areas of research include transportation and environmental planning and policy analysis

### What is GTFS-Flex?

General Transit Feed Specification, or GTFS, is the data behind many transit apps including Google Maps. GTFS describes transit services across the globe and over a million transit stops., but is limited to providing trip planning through methods that have fixed routes, times, and stops. For trips that rely on on-demand transit and flexible routes, standard GTFS can't help.

GTFS-Flex is a proposed expansion of GTFS that helps close this gap by integrating demand-responsive transportation and providing information about flexible transit services. GTFS-Flex allows for seamless combination of fixed-route and dial-a-ride services to provide more complete and efficient journey planning.

GTFS-Flex is both a technology and a social movementhat looks to expand access to trip planning, help planners measure service, and ensure community transit can market to users widely.

### How is GTFS-Flex Used Today?

GTFS-Flex is currently used in OpenTripPlanner, and partially in GoogleMaps.

OpenTripPlanner is used as the back-end for trip planning interface on a transit agencies website like inridetcat.org. It can also be used in mobile applications, such as what the MaaS-oriented Vamos project in San Joaquin, CA. is trying to achieve.

#### **Gaps in GTFS-Flex**

There are many gaps in GTFS-Flex that still need to be addressed. Data producers should export their data onto GTFS-Flex more widely, and more transit apps should use it to let riders know about demand-response services. Lobbying for increased investment into GTFS-Flex, while making sure that everyone is seeing benefits equally. GTFS-Flex can provide a foundation for MaaS ecosystems, greatly increasing transportation options for everyone.











# **GTFS-Flex**

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What Can You do Right Now?

## If you're a DOT or MPO:

GTFS-Flex provides solutions to common problems that DOTs or MPOs offer, inlcuding lack of a standardized directory of services, low ridership. GTFS-Flex data can be used to track and inventory service rules, allowing transit providers to compare demand responsive services, and analyze ridership data. OneTripPlanner offers a statewide or regional flexible trip planning option. In order for GTFS-flex to become fully scalable and more effective, there needs to be more investment, by local DOTs and national organizations like USDOT and AASHTO.

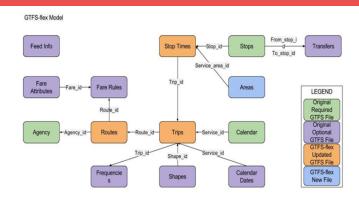
# If you're a Dial-a-ride or paratransit provider

GTFS-Flex also provides solutions to Dial-a-ride and paratransit providers that often face limited budgets and lack of communication with fixed-route services. GTFS-flex has potential to be incredibly useful, and will only become more useful as GTFS-flex is integrated into more trip planners. Work with local and federal grant programs that allow you to invest in better trip planning. Follow and collaborate with larger organization working on GTFS-flex systems.

# If you're considering a **TNC/MaaS** contract

Be aware that most claims that systems are multimodal are marketing"lies". The market hasn't figured out to how deliver MaaS contracts or TNC partnerships that is good for both parties. Keep any contracts short term, as any MaaS contracts are pilots with undetermined outcomes. Don't sell out essential services, and don't be afraid to complain. Any negotiations between local agencies and large companies like Uber are inherently skewed toward the large company. Fight to develop best practices in your

If you're a hail-and -ride service, you can update your GTFS so riders can see hail-andride options. National RTAP can help with their GTFS builder, where riders will be able to see flexible drop off/pickup options. By using the simple Excel toolkit, a transportation agency can input their schedule and then allow for continuous pickup/drop-off based on the specification.







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